

WHAT IS CLAIMED IS:

1. An equipment rack, comprising:
a subrack mounted in a first direction in the equipment rack;
one or more circuit cards, each circuit card being mounted in the subrack in a second direction substantially perpendicular to the first direction and in parallel with each other circuit card mounted in the subrack, each circuit card including one or more ports coupled to a respective optical fiber traveling in the second direction; and
a fiber handling track mounted in the first direction in the equipment rack, the fiber handling track comprising:
one or more radius control bosses, the number of radius control bosses equaling or exceeding the number of circuit cards mounted in the subrack, each of the radius control bosses adapted to receive an optical fiber coupled to a respective one of the one or more circuit cards and divert the received optical fiber from the second direction to the first direction; and
a bell flare located at one end of the fiber handling track, the bell flare adapted to receive the optical fibers diverted by the one or more radius control bosses and divert the received optical fibers from the first direction to a third direction substantially perpendicular to the first direction.
2. An equipment rack according to claim 1,
wherein each of the one or more radius control bosses restricts the bending of the received optical fiber from bending more than a minimum bend radius.
3. An equipment rack according to claim 2,
wherein each of the one or more radius control bosses restricts the bending of the received optical fiber to at least a radius of 25 mm.
4. An equipment rack according to claim 1,
wherein the bell flare restricts the bending of the received one or more optical fibers from bending more than a minimum bend radius.

5. An equipment rack according to claim 4,
wherein each of the one or more radius control bosses restricts the bending
of the received optical fiber to at least a radius of 25 mm.

6. An equipment rack according to claim 1, wherein the fiber handling track
further comprises:

a plurality of radius control tabs, each pair of radius control tabs being
spaced away from and located between adjacent pairs of radius control bosses, the radius
control tabs further restricting the bending of the optical fibers diverted by the radius
control bosses.

7. An equipment rack according to claim 1, wherein the fiber handling track
further comprises:

a second bell flare mounted at the other end of fiber handling track, the
second bell flare receiving at least one of the optical fibers diverted by the one or more
radius control bosses and diverting the received at least one of the optical fibers from the
first direction to the third direction.

8. An equipment rack according to claim 1, wherein the radius control bosses
are located along a first side of the fiber handling track, and the fiber handling track
further comprises:

fiber retention tabs located along a second side of the fiber handling track
opposite the first side, the fiber retention tabs retaining the optical fibers diverted by the
radius control tabs within the fiber handling track.

9. An equipment rack according to claim 1, wherein the fiber handling track
further comprises:

a plurality of cover bosses; and
a plate coupled to the cover bosses, the plate retaining the optical fibers
within the fiber handling track.

10. An equipment rack according to claim 1, further comprising:

at least one or more additional subracks mounted in the first direction of the equipment rack, each additional subrack having one or more circuit cards, each circuit card being mounted in the additional subrack in the second direction and in parallel with each other circuit card mounted in the additional subrack, each circuit card including a port coupled to an optical fiber traveling in the second direction,

wherein each of the radius control bosses is adapted to receive an optical fiber coupled to a respective one of the one or more circuit cards in a respective one of the at least one additional subracks and to divert the received optical fiber from the second direction to the first direction.

11. An equipment rack according to claim 1,

wherein the bell flare includes at least two flared portions, each flared portion being shaped to divert the received optical fibers from the first direction to the third direction and to restrict the bending of the received optical fibers from bending more than a minimum bend radius.

12. A fiber handling track, comprising:

one or more radius control bosses, each of the radius control bosses adapted to receive in a first direction an optical fiber coupled to at least one of one or more circuit cards and divert the received optical fiber from the first direction to a second direction substantially perpendicular to the first direction; and

a bell flare located at one end of the fiber handling track, the bell flare adapted to receive the optical fibers diverted by the one or more radius control bosses and divert the received optical fibers from the second direction to a third direction substantially perpendicular to the second direction.

13. A fiber handling track according to claim 12,

wherein each of the one or more radius control bosses restricts the bending of the received optical fiber from bending more than a minimum bend radius.

14. A fiber handling track according to claim 13,
wherein each of the one or more radius control bosses restricts the bending
of the received optical fiber to at least a radius of 25 mm.

15. A fiber handling track according to claim 12,
wherein the bell flare restricts the bending of the received one or more
optical fibers from bending more than a minimum bend radius.

16. A fiber handling track according to claim 15,
wherein each of the one or more radius control bosses restricts the bending
of the received optical fiber to at least a radius of 25 mm.

17. A fiber handling track according to claim 12, wherein the fiber handling
track further comprises:
a plurality of radius control tabs, each pair of radius control tabs being
spaced away from and located between adjacent pairs of radius control bosses, the radius
control tabs further restricting the bending of the optical fibers diverted by the radius
control bosses.

18. A fiber handling track according to claim 12, wherein the fiber handling
track further comprises:
a second bell flare mounted at the other end of fiber handling track, the
second bell flare receiving at least one of the optical fibers diverted by the one or more
radius control bosses and diverting the received at least one of the optical fibers from the
second direction to the third direction.

19. A fiber handling track according to claim 12,
wherein the radius control bosses are located along a first side of the fiber
handling track, and the fiber handling track further comprises:

fiber retention tabs located along a second side of the fiber handling track opposite the first side, the fiber retention tabs retaining the optical fibers diverted by the radius control tabs within the fiber handling track.

20. A fiber handling track according to claim 12, wherein the fiber handling track further comprises:

a plurality of cover bosses; and

a plate coupled to the cover bosses, the plate retaining the optical fibers within the fiber handling track.

21. A fiber handling track according to claim 12,

wherein the bell flare includes at least two flared portions, each flared portion being shaped to divert the received optical fibers from the second direction to the third direction and to restrict the bending of the received optical fibers from bending more than a minimum bend radius.

22. A terminal unit comprising:

a plurality of optical transceivers for transmitting and receiving WDM signals over optical fibers; and

a fiber handling track for routing said optical fibers to and from said plurality of optical transceivers, said fiber handling track including:

one or more radius control bosses, each of the radius control bosses adapted to receive in a first direction an optical fiber coupled to at least one of the plurality of optical transceivers and divert the received optical fiber from the first direction to a second direction substantially perpendicular to the first direction; and

a bell flare located at one end of the fiber handling track, the bell flare adapted to receive the optical fibers diverted by the one or more radius control bosses and divert the received optical fibers from the second direction to a third direction substantially perpendicular to the second direction.

23. A terminal unit according to claim 22,
wherein each of the one or more radius control bosses restricts the bending
of the received optical fiber from bending more than a minimum bend radius.

24. A terminal unit according to claim 23,
wherein each of the one or more radius control bosses restricts the bending
of the received optical fiber to at least a radius of 25 mm.

25. A terminal unit according to claim 22,
wherein the bell flare restricts the bending of the received one or more
optical fibers from bending more than a minimum bend radius.

26. A terminal unit according to claim 25,
wherein each of the one or more radius control bosses restricts the bending
of the received optical fiber to at least a radius of 25 mm.

27. A terminal unit according to claim 22, wherein the fiber handling track
further comprises:
a plurality of radius control tabs, each pair of radius control tabs being
spaced away from and located between adjacent pairs of radius control bosses, the radius
control tabs further restricting the bending of the optical fibers diverted by the radius
control bosses.

28. A terminal unit according to claim 22, wherein the fiber handling track
further comprises:
a second bell flare mounted at the other end of fiber handling track, the
second bell flare receiving at least one of the optical fibers diverted by the one or more
radius control bosses and diverting the received at least one of the optical fibers from the
second direction to the third direction.

29. A terminal unit according to claim 22,

wherein the radius control bosses are located along a first side of the fiber handling track, and the fiber handling track further comprises:

fiber retention tabs located along a second side of the fiber handling track opposite the first side, the fiber retention tabs retaining the optical fibers diverted by the radius control tabs within the fiber handling track.

30. A terminal unit according to claim 22, wherein the fiber handling track further comprises:

a plurality of cover bosses; and

a plate coupled to the cover bosses, the plate retaining the optical fibers within the fiber handling track.

31. A terminal unit according to claim 22,

wherein the bell flare includes at least two flared portions, each flared portion being shaped to divert the received optical fibers from the second direction to the third direction and to restrict the bending of the received optical fibers from bending more than a minimum bend radius.